

**Remarks**

Claims 1, 18-2, 31, 32, 34-3, 42, 44-50, 52-60, 64 and 6-70 have been cancelled. The Examiner has withdrawn Claims 3, 10, 11, 67, 73 and 74 from further consideration. Claims 2, 29, 30, 33, 49-41, 43, 51, 61-63, 65, 66, 71 and 72 are currently under examination. Claims 2, 4-9 have been amended to delete the amino acid "D". Claim 40 has been amended to correct the spelling of the word "neutrophil." Claims 61-63 were amended to clearly show an outcome based on the preamble. Support for the amendment to claim 61 can be found on page 7, lines 18-19 and on page 11, lines 21-29, and in the original claim. Support for the amendments to claims 62-63 can be found in the original claims. Applicants submit that no new matter is added by these amendments.

**Claim Objections**

The Office Action objects to claim 40 for improperly spelling the word, "neutrophil." Appropriate correction has been made. Applicants respectfully request withdrawal of this objection.

**Claim Rejections – 35 USC § 112, Second Paragraph**

Claims 61-63 have been rejected under 35 U.S.C. 112, second paragraph for allegedly failing to particularly point out and distinctly claim the subject matter which applicant regards as their invention. Specifically, the Office Action states that claims 61-63 lack an outcome. Applicants respectfully traverse. The Office Action states that the claim should include enough information to clearly and accurately describe the invention and how it is to be practiced.

Applicants have amended the claim to describe the invention and how it is to be practiced.

Applicants respectfully request withdrawal of this rejection.

**Claim Rejections – Non-Statutory Double Patenting**

The Office Action has rejected Claims 2, 29, 30, 33, 39-41, 43, 51, 61-63, 65, 66, 71, and 72 are rejected on the ground of non-statutory double patenting over at least claims 3, 15, 16, and 21-25, for example of U.S. Patent No. 6,878,813 (Bock et al.) since allegedly the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent. The Office Action alleges that the subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter. The Office Action goes on to state that the claims of the patent encompass mutations in ATIII at P3, and the instant application does not exclude mutations other than at P3. Applicants respectfully traverse. Specifically, Bock et al. does not teach or suggest that the amino acid substitution at position P3 is E, H, K, L, P, Q, R, W, or Y, as is specified in the claims.

According to the MPEP, section 804:

A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); and *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985).< In determining whether a nonstatutory basis exists for a double patenting rejection, the first question to be asked is - does any claim in the application define an invention that is >anticipated by, or is< merely an obvious variation of >,< an invention claimed in the patent?

Applicants would like to point out that the amino acid substitutions of the present invention are different than those found in Bock et al., and those amino acid substitutions of the present claims would not be obvious variants, as one of skill in the art would have understood that each change in amino acid is very significant and can greatly affect the functionality of the peptide, in this case ATIII. Applicants therefore respectfully request withdrawal of this rejection.

**Rejection Under 35 U.S.C. § 102**

Claims 2, 29, 30, 33, 39-41, 43, 51, 61-63, 66, and 72 are rejected under 35 U.S.C. 102(e) as allegedly being anticipated by Bock et al. (USP 6,878,813). Applicants respectfully traverse this rejection. Bock et al. does not teach or suggest that the amino acid substitution at position P3 is E, H, K, L, P, Q, R, W, or Y, as is specified in the claims. The Office Action states that, "Claim 2, wherein ATIII substitution at P3, is anticipated by the Asp (D) substitution, and wherein P3 is Leu is anticipated by Bock et al.'s Gly (G) and Ile (I) substitutions." Applicants respectfully note that Bock et al. does not teach or suggest an Asp (D, aspartic acid) substitution, but rather an Asn (N, asparagine) substitution. Furthermore, Bock et al. does not teach or suggest a Leu (L, leucine) substitution. The Office Action seems to be suggesting that a substitution of isoleucine (I) or glycine (G) is identical to a leucine (L) substitution, which is clearly not the case, since leucine, isoleucine, and glycine all differ in structure.

For a prior art reference to anticipate a claimed invention, each and every element of the claimed invention must be disclosed in that single reference. Further, the disclosure in that single reference must be enabling. If one element of the claimed invention is not disclosed in the

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prior art reference, there is no anticipation. It is settled law that “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently.”

*Verdegaal v. Union Oil*, 814 F2d. 628, 2 USPQ2d 1051 (Fed. Cir. 1987). Since none of the amino acid substitutions presently claimed are either expressly or inherently taught in Bock et al., this rejection is deemed improper. Applicants respectfully request withdrawal of this rejection.

Claims 2, 29, 30, 33, 39-41, 43, 51, 61-63, 66, and 72 are also rejected under 35 U.S.C. 102(b) as allegedly being anticipated by Dijkema et al. (WO 91/00291, published January 10, 1991 ). The Office Action states that Dijkema et al. teach variant ATIII having Ala391Asp. Applicants respectfully traverse this rejection. However, in an effort to expedite prosecution, applicants have amended the claims to delete Asp (D, aspartic acid) from the claims. Applicants therefore respectfully request withdrawal of this rejection.

Claims 2, 29, 30, 33, 39-41, 43, 51, 61-63, 66, and 72 are also rejected under 35 U.S.C. 102(b) as allegedly being anticipated by Theunissen et al. (1993; J. Biol. Chem. 268(12): 9035-9040). The Office Action states that Theunissen et al. teach variant ATIII having AlaP3Asp. Applicants respectfully traverse this rejection. However, in an effort to expedite prosecution, applicants have amended the claims to delete Asp (D, aspartic acid) from the claims. Applicants therefore respectfully request withdrawal of this rejection.

Pursuant to the above amendments and remarks, reconsideration and allowance of the pending application is believed to be warranted. The Examiner is invited and encouraged to

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directly contact the undersigned if such contact may enhance the efficient prosecution of this application to issue.

An EFS Web Credit Card Payment authorizing payment in the amount of \$525.00 representing the fee for a small entity under 37 C.F.R. § 1.17(a)(3), and a Request for Extension of Time are being submitted electronically. This amount is believed to be correct; however, the Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 14-0629.

Respectfully submitted,

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May 9, 2008

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